

**What is claim is**

1. An array configuration for a multiple disk-arrays system containing at least one disk array, comprising:

an array signature field for identifying a disk in said disk array or in a span array;

an array information for recording at least one setting and at least one status of said disk array;

a disk information for recording at least one information in each disk of each disk array; and

a serial check sum of each disk in said same disk array.

2. The array configuration as in claim 1, wherein said array configuration is arranged at said last sector of a disk in a disk array.

3. The array configuration as in claim 1, further comprising a version identification field used to record a version of firmware and software in said disk array.

4. The array configuration as in claim 1, wherein said array signature field has size of one word (16 bits).

5. The array configuration as in claim 1, wherein said array signature field is a specific value.

6. The array configuration as in claim 1, wherein said serial check sum of each disk in disk array is numerated from a model number, a serial number, and a firmware revision number of said disk.

7. The array configuration as in claim 6, wherein said serial check sum of each disk has size of one double word (32 bits).

8. The array configuration as in claim 1, wherein said array information comprises an array type field, an array disk number field and an available disk capacity field.

9. The array configuration as in claim 8, wherein said array type field has  
5 size of 4 bits and has a specific value to denote a specific array type.

10. The array configuration structure as in claim 8, wherein said array disk number field has size of 3 bits to denote a disk number in a disk array.

11. The array configuration as in claim 8, wherein said available disk capacity field has size of double word (32 bits) to denote an available disk  
10 capacity for each disk in a disk array.

12. The array configuration as in claim 8, further comprising an array broken flag.

13. The array configuration as in claim 8, further comprising a size field of recoded data stripe.

14. The array configuration as in claim 13, wherein said size field has size  
15 of 4 bits.

15. The array configuration as in claim 8, further comprising a serial number field to denote a sequence of arrays in said multiple disk-array system.

16. The array configuration as in claim 15, wherein said serial number  
20 field has size of 3 bits.

17. The array configuration as in claim 1, wherein said disk information comprises boot field, enhanced field, a serial check sum field and a disk sequence/function field.

18. The array configuration as in claim 17, wherein said serial check sum

field has size of 32 bits.

19. The array configuration as in claim 17, wherein said disk sequence/function field has size of 5 bits.

20. The array configuration structure as in claim 1, further comprising an  
5 array serial check sum.

21. The array configuration as in claim 20, wherein said array serial check sum has size of 1 byte.